From: Wright, Jeff

To: <u>Gary Moore/R6/USEPA/US@EPA</u>
Subject: RE: Delta Shipyards Treatability Tests

Date: 02/14/2013 04:01 PM

Our guys stated that if the stabilization prevents leaching of contaminants to the groundwater we might be able to get by with just monitoring the groundwater to verify that the concentrations are attenuating. It depends on what happens to the groundwater after the waste is stabilized.

I don't think LDEQ dewatered the ground water table in the area that they conducted solidification/stabilization at the Bayou Trepagnier site (which they oversaw). I've got a call into John Halk to confirm.



Jeff Wright, CHMM Weston Solutions, Inc.

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Jeff.Wright@westonsolutions.com

From: Moore.Gary@epamail.epa.gov [mailto:Moore.Gary@epamail.epa.gov]

Sent: Wednesday, February 13, 2013 4:23 PM

To: Wright, Jeff

Subject: Re: Delta Shipyards Treatability Tests

Could you tell them we are doing this solely for dewatering purposes. What other options do we have.

Gary

Gary Moore Federal On-Scene Coordinator EPA Region 6

Cell: 214-789-1627 Work: 214-665-6609

email: moore.gary@epa.gov

From: "Wright, Jeff" [Jeff.Wright@WestonSolutions.com]

Sent: 02/13/2013 04:30 PM EST

To: Gary Moore

Subject: RE: Delta Shipyards Treatability Tests



Got the follow info from our guys in Houston. Hope this helps.

Typically, a slurry wall is keyed into the lower confining layer about 2 feet. If you encircle the contaminated area it effectively creates a "bathtub" with the slurry wall around the outside and the lower confining layer as the bottom of the tub. I ordinarily do a soil boring every 100 ft. along the alignment so we know where to expect the lower confining layer while we're excavating. It's really important to be confident that the lower confining layer is a competent clay that will prevent downward migration (i.e. so water isn't leaking through the bottom of the bathtub).

After the slurry wall is installed you need to figure out if and how you'll manage the accumulation of groundwater within the wall. If the surface isn't capped or there isn't some amount of groundwater pumping, rainwater will infiltrate and fill up the tub and you can have seeps at the surface.



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From: Moore.Gary@epamail.epa.gov [mailto:Moore.Gary@epamail.epa.gov]

Sent: Wednesday, February 13, 2013 2:57 PM

To: Wright, Jeff

Subject: RE: Delta Shipyards Treatability Tests

Jeff:

How do you determine the depth you would need to go in place a slurry wall or sheet piling?

Thanks

Gary Moore Federal On-Scene Coordinator EPA Region 6 Cell: 214-789-1627

Work: 214-665-6609

email: moore.gary@epa.gov

From: "Wright, Jeff" < <u>Jeff.Wright@WestonSolutions.com</u>>

To: Gary Moore/R6/USEPA/US@EPA

Date: 02/12/2013 03:15 PM

Subject: RE: Delta Shipyards Treatability Tests

Gary.

Wanted to follow-up on your Delta Shipyard slurry wall question. I spoke with our guys in Houston and got the following info,

"Assuming that you'd need to go 40 ft. deep, the wall would be about 60,000 vertical sq. ft. A typical cost for conventional slurry wall is about \$8-10/VSF or about \$600k not including mobe, disposal of excess soil and a number of other details that could at least double this cost. Sheet piling is about \$25/VSF so about \$1.5M, plus mobe and other details (no soil disposal required). These are not construction estimates but should give you an idea of the ballpark (\$1-2M). "

David and I did ask if the estimate per VSF would hold true for a more shallow confining clay layer (i.e. 8-10 ft.). They responded by stating that "If you're only talking about 10 ft. to the bottom of the water-bearing zone, you could do this with a lot smaller excavator but you'd still have to set up the slurry-mixing operations, The VSF may be somewhat more expensive but the mobilization could be less.

Hope this helps,



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From: Moore.Gary@epamail.epa.gov [mailto:Moore.Gary@epamail.epa.gov]

Sent: Thursday, January 31, 2013 2:47 PM

To: Wright, Jeff

Subject: Re: Delta Shipyards Treatability Tests

Jeff:

Does LDEQ have a soil to groundwater number(s)?

Could you also ask someone about vinyl/composite sheet piling and what would be the best to use to place around the site to allow for dewatering and preventing water entering the pits?

Thanks

Gary Moore Federal On-Scene Coordinator EPA Region 6

Cell: 214-789-1627 Work: 214-665-6609

email: moore.gary@epa.gov

From: "Wright, Jeff" < Jeff.Wright@WestonSolutions.com>

To: Gary Moore/R6/USEPA/US@EPA

Cc: "Bordelon, David" < <u>David.Bordelon@WestonSolutions.com</u>>

Date: 01/29/2013 05:04 PM

Subject: Delta Shipyards Treatability Tests

Gary -

I spoke with our Kemron representative yesterday. The primary question he had was the number of source material samples to be analyzed (e.g. will we submit each Pit sample for individual Treatability Analysis). I mentioned to him that the samples we have from the site are geoprobe core cuttings and would not contain the same amount of %moisture as the in situ material. He stated that they could manipulate the %moisture content during the Treatability Study. We would need to define what %moisture to run the tests.

Our other option would be to remobilize to the site with an extended-boom trackhoe and collect a representative sample from each pit. I would suggest that if we were to remob and collect new samples that they be submitted as individual Treatability Samples. If we decide to go with what we have, I would suggest combining all cutting together and then have the lab run the tests with the %moisture set at a couple different levels (maybe 40% and 60%, but I'll research a little more). The trackhoe method would certainly be less subjective and more indicative of real world conditions. I could put together cost estimate for procuring trackhoe services (1-day) if you're interested.

Regardless of which materials we decide to use, he only needs the actual number of source material samples to put together a cost proposal. We could request three, which would probably be the conservative way to go. Let me know what you think.

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